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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,117	01/11/2002	Peter A. Yared	16159.020001; P6415	1021
32615	7590	08/25/2005	EXAMINER	
OSHA LIANG L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			TIV, BACKHEAN	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/046,117

Applicant(s)

YARED ET AL.

Examiner

Backhean Tiv

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

Claims 1-23 are pending in this application. This is a response to the amendment filed on 5/18/05.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10,11,23 are rejected under 35 U.S.C. 101 because claims 1-10,11,23 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 3-10, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments and intangible embodiments. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-7, 12-13, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Patent 5,491,821 issued to Kilis.

As per claims 1,12 Mlynarczyk teaches distributed computer system, comprising:

a client(Abstract, Fig.1);

a server operatively connected to the client (Abstract, Fig.1);

a client-side transport packager located on the client(Abstract, Fig.1);

a server-side transport packager located on the server(Abstract, Fig.1);

creating an internal representation using a root object of the object graph (paragraph [0033], [0039] & [0043] and Fig. 4; wherein the local system is creating or replicating the same inheritance hierarchy as in the server S. Smart PA and Smart PB are internally representing interface A and interface B on the server where the interfaces are inheriting base class or root class represented by the RMI block);

instantiating a cast object graph using a casting rule and the internal representation (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes); and

populating the cast object graph (paragraph [0048]; wherein when the cast object graph is instantiated the constructor of the collection of objects initialized the object attributes by populating them with default values).

Mlynarczyk however, does not explicitly teach modification of an object name according to a casting rule.

Kilis teaches modification of an object name according to a casting rule(col.3, lines 65-15).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mlynarczyk to modify an object name according

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to a casting rule as taught by Kilis in order to process an object to a certain application environment(Kilis, col.1, lines 54-60).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mlynarczyk and Kilis to provide a system to improve the efficiency of building knowledge based systems(Kilis, col.1, lines 14-50).

As per claim 2,13, Mlynarczyk teaches further comprising: instantiating a cast object graph attribute using the casting rule and the internal representation (paragraph [0040]; when the object graph is cast to a different name, the attributes are implicitly cast).

As per claim 4,15, Mlynarczyk teaches further comprising: obtaining a class definition, wherein the class definition is used to create the internal representation (paragraph [0033]; wherein when the creation of objects are initiated the system has to reference the class definition to create and instantiate the object which has internal representation).

As per claim 5, 16, Mlynarczyk teaches wherein the class definition is generated at runtime by a transport packager (paragraph [0039]; wherein when the system is replicating the same inheritance hierarchy at runtime in RMI, the class definition has to be used in order for the system to define the features of the objects).

As per claim 6,17, Mlynarczyk teaches wherein the casting rule comprises a casting method (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes).

As per claim 7,18, Mlynarczyk teaches wherein the casting method implements a mapping method (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B clases).

Claims 3, 10-11, 14, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Patent 5,491,821 issued to Kilis in further view of US Patent 6,125,400 issued to Cohen et al.(Cohen).

As per claim 3,14, Mlynarczyk in view of Kilis teaches all the limitations of claims 1 and 12 however does not explicitly teach retrieving the root object using a variable usage specification.

Cohen teaches a variable usage specification used to transport necessary object attributes (col. 2 lines 32-50).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Mlynarczyk in view of Kilis to use a variable usage specification used to transport necessary object attributes as taught by Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Kilis, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

As per claim 10,21, Mlynarczyk in view of Kilis fails to explicitly teach the internal representation is a serialized file.

Cohen teaches serializing an object with internal representation before transporting to the remote site(col. 2 lines 32-50).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Mlynarczyk in view of Kilis to use serializing an object with internal representation before transporting to the remote site as taught by Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Kilis, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

As per claim 11, 22, 23: Mlynarczyk teaches a method for dynamically casting an object graph, comprising:

- a client(Abstract, Fig.1);

- a server operatively connected to the client (Abstract, Fig.1);

- a client-side transport packager located on the client(Abstract, Fig.1);

- a server-side transport packager located on the server(Abstract, Fig.1);

- obtaining a class definition, wherein the class definition is used to create an internal representation (paragraph [0033]; wherein when the creation of objects are initiated the system has to reference the class definition to create and instantiate the object which has internal representation);

creating the internal representation using the root object of the object graph (paragraph [0033], [0039] & [0043] and Fig. 4; wherein the local system is creating or replicating the same inheritance hierarchy as in the server S. Smart PA and Smart PB are internally representing interface A and interface B on the server where the interfaces are inheriting base class or root class represented by the RMI block);

instantiating a cast object graph using a casting rule and the internal representation (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes);

populating the cast object graph (paragraph [0048]; wherein when the cast object graph is instantiated the constructor of the collection of objects initialized the object attributes by populating them with default values); and

instantiating a cast object graph attribute using the casting rule and the internal representation (paragraph [0040]; when the object graph is cast to a different name, the attributes are implicitly cast).

Mlynarczyk, however, fails to explicitly teach retrieving the root object using a variable usage specification and modification of an object name according to a casting rule.

Kilis teaches modification of an object name according to a casting rule(col.3, lines 65-15).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mlynarczyk to modify an object name according



to a casting rule as taught by Kilis in order to process an object to a certain application environment(Kilis, col.1, lines 54-60).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mlynarczyk and Kilis to provide a system to improve the efficiency of building knowledge based systems(Kilis, col.1, lines 14-50).

Cohen teaches a variable usage specification used to transport necessary object attributes (col. 2 lines 32-50).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Mlynarczyk in view of Kilis to selectively serializing the objects as taught by Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Kilis, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

Claims 8,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Patent 5,491,821 issued to Kilis in further view of US Publication 2002/0188950 issued to Soloff.

As per claim 8,19, Mlynarczyk in view of Kilis teaches all the limitations of claims 6 and 17 however fails to explicitly teach implementing a parser method.

Soloff teaches a parser application to search and replace text strings on selected files or directories (paragraph [0077]).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Mlynarczyk in view of Kilis to add a a parser application to search and replace text strings on selected files or directories as taught by Soloff in order to provide flexibilities in searching and replacing functions.

One would have been motivated to combine the teachings of Mlynarczyk, Kilis, and Soloff in order to provide flexibilities in searching and replacing functions.

Claims 9,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Patent 5,491,821 issued to Kilis in further view of US Patent 4,853,843 issued to Ecklund.

As per claim 9,20 Mlynarczyk in view of Kilis teaches all the limitations of claims 6 and 17 however, fails to explicitly teach the casting method implements a suffix method.

Ecklund teaches a method of adding a suffix to make an object name unique (col. 19 lines 4-10 and col. 40 lines 1-2).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Mlynarczyk in view of Kilis to add a suffix to make an object name unique as taught by Ecklund in order for resolving name conflicts among objects (col. 40 lines 1-5 Ecklund).

One would have been motivated to combine the teachings of Mlynarczyk, Kilis,

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and Ecklund to provide a system to resolve name conflicts among objects(Ecklund, col.40, lines 1-5).

Claims 1-2, 4-8, 12-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Publication 2002/0188950 issued to Soloff.

As per claims 1,12 Mlynarczyk teaches distributed computer system, comprising:

- a client(Abstract, Fig.1);

- a server operatively connected to the client (Abstract, Fig.1);

- a client-side transport packager located on the client(Abstract, Fig.1);

- a server-side transport packager located on the server(Abstract, Fig.1);

- creating an internal representation using a root object of the object graph (paragraph [0033], [0039] & [0043] and Fig. 4; wherein the local system is creating or replicating the same inheritance hierarchy as in the server S. Smart PA and Smart PB are internally representing interface A and interface B on the server where the interfaces are inheriting base class or root class represented by the RMI block);

- instantiating a cast object graph using a casting rule and the internal representation (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B clases); and

populating the cast object graph (paragraph [0048]; wherein when the cast object graph is instantiated the constructor of the collection of objects initialized the object attributes by populating them with default values).

Mlynarczyk however, does not explicitly teach modification of an object name according to a casting rule.

Soloff teaches modification of an object name according to a casting rule (paragraph 0077).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mlynarczyk to modify an object name according to a casting rule as taught by Soloff in order to process an object to a certain application environment.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mlynarczyk and Soloff to provide a system to improve the efficiency of building knowledge based systems.

As per claim 2,13, Mlynarczyk teaches further comprising: instantiating a cast object graph attribute using the casting rule and the internal representation (paragraph [0040]; when the object graph is cast to a different name, the attributes are implicitly cast).

As per claim 4,15, Mlynarczyk teaches further comprising: obtaining a class definition, wherein the class definition is used to create the internal representation (paragraph [0033]; wherein when the creation of objects are initiated the system has to

reference the class definition to create and instantiate the object which has internal representation).

As per claim 5, 16, Mlynarczyk teaches wherein the class definition is generated at runtime by a transport packager (paragraph [0039]; wherein when the system is replicating the same inheritance hierarchy at runtime in RMI, the class definition has to be used in order for the system to define the features of the objects).

As per claim 6, 17, Mlynarczyk teaches wherein the casting rule comprises a casting method (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes).

As per claim 7, 18, Mlynarczyk teaches wherein the casting method implements a mapping method (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes).

As per claim 8, 19, Soloff teaches a parser application to search and replace text strings on selected files or directories (paragraph [0077]). Motivation to combine set forth in claim 1.

Claims 3, 10-11, 14, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Publication 2002/0188950 issued to Soloff in further view of US Patent 6,125,400 issued to Cohen et al.(Cohen).

As per claim 3,14, Mlynarczyk in view of Soloff teaches all the limitations of claims 1 and 12 however does not explicitly teach retrieving the root object using a variable usage specification.

Cohen teaches a variable usage specification used to transport necessary object attributes (col. 2 lines 32-50).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Mlynarczyk in view of Soloff to use a variable usage specification used to transport necessary object attributes as taught by Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Soloff, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

As per claim 10,21, Mlynarczyk in view of Soloff fails to explicitly teach the internal representation is a serialized file.

Cohen teaches serializing an object with internal representation before transporting to the remote site(col. 2 lines 32-50).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Mlynarczyk in view of Soloff to use serializing an object with internal representation before transporting to the remote site as taught by Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Soloff, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

As per claim 11, 22, 23: Mlynarczyk teaches a method for dynamically casting an object graph, comprising:

- a client(Abstract, Fig.1);

- a server operatively connected to the client (Abstract, Fig.1);

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- obtaining a class definition, wherein the class definition is used to create an internal representation (paragraph [0033]; wherein when the creation of objects are initiated the system has to reference the class definition to create and instantiate the object which has internal representation);

- creating the internal representation using the root object of the object graph (paragraph [0033], [0039] & [0043] and Fig. 4; wherein the local system is creating or replicating the same inheritance hierarchy as in the server S. Smart PA and Smart PB are internally representing interface A and interface B on the server where the interfaces are inheriting base class or root class represented by the RMI block);

- instantiating a cast object graph using a casting rule and the internal representation (paragraph [0040]; wherein the casting rule is the encapsulation of the references to the remote objects in the naming system where the references maps to the local SmartProxy A and SmartProxy B classes);

populating the cast object graph (paragraph [0048]; wherein when the cast object graph is instantiated the constructor of the collection of objects initialized the object attributes by populating them with default values); and

instantiating a cast object graph attribute using the casting rule and the internal representation (paragraph [0040]; when the object graph is cast to a different name, the attributes are implicitly cast).

Mlynarczyk, however, fails to explicitly teach retrieving the root object using a variable usage specification and modification of an object name according to a casting rule.

Soloff teaches modification of an object name according to a casting rule(paragraph 0077).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mlynarczyk to modify an object name according to a casting rule as taught by Soloff in order to process an object to a certain application environment.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mlynarczyk and Soloff to provide a system to improve the efficiency of building knowledge based systems.

Cohen teaches a variable usage specification used to transport necessary object attributes (col. 2 lines 32-50).

It would been obvious to one of ordinary skill in the art at the time of the invention to modify Mlynarczyk in view of Soloff to selectively serializing the objects as taught by



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Cohen in order to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

One ordinary skill in the art would have been motivated to combine the teachings of Mlynarczyk, Soloff, and Cohen in order to provide a system to reduce the amount of information sent to invoke a remote application (Cohen, col. 2 lines 5-10).

Claims 9,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2002/0029375 issued to Mlynarczyk et al.(Mlynarczyk) in view of US Publication 2002/0188950 issued to Soloff in further view of US Patent 4,853,843 issued to Ecklund.

As per claim 9,20, Mlynarczyk in view of Soloff teaches all the limitations of claims 6 and 17 however, fails to explicitly teach the casting method implements a suffix method.

Ecklund teaches a method of adding a suffix to make an object name unique (col. 19 lines 4-10 and col. 40 lines 1-2).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Mlynarczyk in view of Soloff to add a suffix to make an object name unique as taught by Ecklund in order for resolving name conflicts among objects (col. 40 lines 1-5 Ecklund).

One would have been motivated to combine the teachings of Mlynarczyk, Soloff,

and Ecklund to provide a system to resolve name conflicts among objects(Ecklund, col.40, lines 1-5).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571)272-3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.***

BT  
Backhean Tiv  
2151  
8/18/05

  
ZARNI MAUNG  
SUPERVISORY PATENT EXAMINER